

Amirhossein Kazemzadeh Haghighi



Birthdate: 21 Jun 1998



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RESEARCH INTERESTS

- ★ Plant Stress Physiology
- ★ Plant Biochemistry
- ★ Plant Genetics
- ★ Plant Biotechnology
- ★ Plant Molecular Biology
- ★ Machine Learning

LANGUAGES

English

Advanced Level

TOEFL IBT

Feb 3rd, 2024

- **Overall: 108**
- **Reading: 28**
- **Listening: 26**
- **Speaking: 27**
- **Writing: 27**

Persian (Farsi)

Native

EDUCATION

Master of Science (M.Sc.) in Plant Physiology

University of Tehran, Tehran, Iran

Sep 2020 - Sep 2022

GPA: 18.94 out of 20

Thesis: Effects of Samarium Nitrate and Cerium Nitrate on the Antioxidative Systems and Growth Parameters in Two Cultivars of Wheat (*Triticum aestivum* L.)

(score: 19.80 out of 20)

Supervisor:

Dr. Maryam Rezayian (Assistant Professor at Department of Plant Sciences, College of Science, University of Tehran (UT), Tehran, Iran)

Dr. Vahid Niknam (Professor at Department of Plant Sciences, College of Science, University of Tehran (UT), Tehran, Iran),

Dr. Mohammad Reza Ganjali (Professor of Analytical Chemistry, Head of the Centre of Excellence in Electrochemistry, and Dean of the College of Science at the University of Tehran (UT), Tehran, Iran),

Advisor:

Masoud Mirmasoumi (Lecturer at Department of Plant Sciences, College of Science, University of Tehran (UT), Tehran, Iran).

Bachelor of Science (B.Sc.) in Plant Biology

University of Tehran, Tehran, Iran

Sep 2016 - Sep 2020

GPA: 16.17 out of 20

Pre-University Diploma in Experimental Sciences

Dr. Danesh Pre-University Center, Tehran, Iran

Sep 2015 - Jun 2016

GPA: 18.66 out of 20

High School Diploma in Experimental Sciences

Dr. Danesh High school, Tehran, Iran

Sep 2012 - Jul 2015

GPA: 19.59 out of 20

PUBLICATIONS

Research Article

Cerium and samarium blocked antioxidant enzymes in wheat plants

Amirhossein Kazemzadeh Haghighi; Maryam Rezayian; Mohammad Reza Ganjali; Masoud Mirmasoumi

Cerium and samarium blocked antioxidant enzymes in wheat plants. *Scientific Reports* **13**, 8252 (2023).

DOI: <https://doi.org/10.1038/s41598-023-35561-2>

Link: <https://www.nature.com/articles/s41598-023-35561-2>

Research Article

Evaluation of the growth regulators, sugars and amino acid tryptophan effect on the rate of tryptophan decarboxylase enzyme on *Vinca major* L. in tissue culture, cell suspension culture and field culture conditions

Ali Kazemzadeh Haghighi; Fariba Khosravinejad; **Amirhossein Kazemzadeh Haghighi**

DOI: 10.30495/ZISTI.2023.1976340.1150

Link: https://zisti.varamin.iau.ir/article_700984.html

TECHNICAL SKILLS

SPSS
XLSTAT
⇒ PCA
CIMMiner
⇒ HCA
Mendeley
Python
Microsoft Office Package
Proficient

SOFT SKILLS

Time Management
Teamwork
Problem Solving
Attention to details
Resilience
Interpersonal skills
Listening skills
Enquiring mind
Tireless
Fast learner

WORK EXPERIENCE

Research Assistant in Plant Physiology and Biochemistry Research Laboratory
Department of Plant Sciences, College of Science, University of Tehran (UT)
Sep 2024– Ongoing
Tehran, Iran

Tasks:

- Catalase (CAT) Analysis.
- Polyphenol Oxidase (PPO) Analysis.
- Peroxidase (PR) Analysis.
- Superoxide Dismutase (SOD) Analysis.
- Anthocyanin Analysis.
- Phenol Analysis.
- Flavonoid Analysis.
- Malondialdehyde (MDA) Analysis.
- Hydrogen Peroxide Analysis.
- Proline Analysis.
- Polyacrylamide Gel Electrophoresis (PAGE).
- SDS-PAGE.
- Data Analyzing using SPSS, CIMminer, and XLSTAT.

Research Assistant and Growth Assistant in Plant Tissue Culture
Department of Plant Sciences, College of Science, University of Tehran (UT)
Dec 2023 - June 2024
Tehran, Iran

Tasks:

- Philodendron Birkin.
- Philodendron White Princess.
- Philodendron White Night.
- Philodendron White Wizard.
- Philodendron Pink Princess.
- Alocasia.
- Dracaena.
- Ficus.
- Root Induction Medium Procedure (RIM).
- Callus Induction Medium Procedure (CIM).
- Shoot Induction Medium Procedure (SIM).

Research Assistant in Arzesh Institute of Biology and Chemistry
Arzesh Institute of Biology and Chemistry
April 2023 - May 2024
Tehran, Iran

Task:

- Gathering Thorough Information about the Effects of REE Fertilizers on Plants.

Research Assistant in Plant Physiology and Biochemistry Research Laboratory
Department of Plant Sciences, College of Science, University of Tehran (UT)
Jan 2022 - Jul 2022
Tehran, Iran

Tasks:

- Plant Micropropagation (Caladium, Anthurium).
- Root Induction Medium Procedure (RIM)
- Callus Induction Medium Procedure (CIM)
- Shoot Induction Medium Procedure (SIM)

Teaching Assistant in Plant Biology
Department of Plant Sciences, College of Science, University of Tehran (UT)
Jan 2022 - Jul 2022
Tehran, Iran

Tasks:

- PAGE
- SDS-PAGE
- Standard Curve Context
- Spectrophotometer Methods (Single Beam and Double Beam)

WORK EXPERIENCE

Research Assistant in Plant Physiology and Biochemistry Research Laboratory

Department of Plant Sciences, College of Science, University of Tehran (UT)

Sep 2021 - Aug 2022

Tehran, Iran

Tasks:

- Catalase (CAT) Analysis.
- Polyphenol Oxidase (PPO) Analysis.
- Peroxidase (PR) Analysis.
- Superoxide Dismutase (SOD) Analysis.
- Anthocyanin Analysis.
- Phenol Analysis.
- Flavonoid Analysis.
- Malondialdehyde (MDA) Analysis.
- Hydrogen Peroxide Analysis.
- Proline Analysis.
- Polyacrylamide Gel Electrophoresis (PAGE).
- SDS-PAGE.
- Data Analyzing using SPSS, CIMminer, and XLSTAT.

Scientific Translator (English to Persian)

University of Tehran (UT)

Sep 2019 - Sep 2020

Tehran, Iran

Laboratory Skills

Molecular

- PAGE
- SDS-PAGE
- PCR
- Gene Transfer
- Hairy-Root Induction
- Plant Biotechnology
- Micropropagation & Tissue Culture

Devices

- Centrifuge
- PCR
- Spectrophotometry Device
- Microscopy
(TEM, SEM, Confocal, Compound, Stereo)
- Incubator
- Laminar
- Sterilizer Device
- pH Meter

Biochemistry

- Catalase (CAT) Analysis.
- Polyphenol Oxidase (PPO) Analysis.
- Peroxidase (PR) Analysis.
- Superoxide Dismutase (SOD) Analysis.
- Anthocyanin Analysis.
- Phenol Analysis.
- Flavonoid Analysis.
- Malondialdehyde (MDA) Analysis.
- Hydrogen Peroxide Analysis.
- Proline Analysis.
- Soluble Sugars
- Chlorophyll Content

AWARDS

- Ranked 1st among M.Sc. students of Plant Physiology at University of Tehran (UT).
- Ranked 4th among B.Sc. students of Plant Biology at University of Tehran (UT).
- Ranked 3rd in the Iran's Nation Wide Entrance Exam for Master's.

CERTIFICATIONS

Workshop of Introduction to Molecular Preliminary Methods


□ Royan Institute

18 May– 19 May, 2017 (48h)

REFERENCE


Dr. Maryam Rezayian

Assistant Professor-College of Science-School of Biology-University of Tehran

 maryamrezayian@ut.ac.ir


Dr. Masoomeh Jannesar

Assistant Professor-College of Science-School of Biology-University of Tehran

 jannesar@ut.ac.ir

Mr. Masoud Mirmasoumi

Lecturer-College of Science-School of Biology-University of Tehran

 mirmasoumi@ut.ac.ir

Dr. Hamid Reza Sadeghipour

Associate Professor-Department of Biology-Faculty of Science-Golestan University

 h.r.sadeghipour@gu.ac.ir